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# Teaching for the Millennial Generation: Student and Teacher Perceptions of Community Building and Individual Pedagogical Techniques<sup>1</sup>

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#### Abstract

As a new generation of learners enters higher education classrooms, effective teaching strategies must adapt to match their learning styles. This research explored student and teacher perceptions of effectiveness of teaching methods, with particular comparison between techniques emphasizing community versus individual learning. Fifteen psychology teachers and 120 undergraduate students rated how interesting and effective they found 17 pedagogical techniques ranging from lecture to simulation gaming. Results suggested that students perceived techniques that connected them to the classroom community, such as discussion and sharing stories from teachers' and students' lives, as more effective than did teachers. Teachers gave higher effectiveness ratings to techniques emphasizing individual learning, such as papers and quizzes. Findings suggest that teachers may want to spend more time on activities that build connections between students and linking academic material to students' lives.

**Keywords:** Pedagogical techniques, student perceptions, community learning, engaged learning, millennial generation.

When we want to know how to teach well, we often turn to teachers who share knowledge about how to engage students in learning (Daniel, 2005; Lucas & Bernstein, 2005). However, as new generations of students enter college, their needs and learning styles may change at a faster rate than do the existing cohort of faculty. In particular, McGlynn (2005) describes a new generation of college students with increasingly diverse backgrounds and learning needs. A major portion of this cohort is known as Millennials, Generation M, or Echo Boomers who are traditional-aged college students born after 1982. These students were raised with technology that allows constant connection to friends and family. Text and instant messaging, cell phones, beepers, blogs and social networking are a normal part of their everyday life and allow connection anytime and anywhere. Frand (2000) suggests that to be isolated from others is unthinkable for this group, yet many of our current teaching techniques expect them to disconnect from their friends and technology and listen to lecture or work independently. In addition, this cohort may include 26-year-old Generation X students with "customer service" expectations about

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education, and 40-year-old parents juggling family, work, and coursework (both in the classroom and online). Finally, this generation includes more individuals from non-white ethnic backgrounds than in prior history at approximately 34% of students. As McGlynn describes, this new cohort of students may prefer teaching approaches that emphasize teamwork, experiential activities, and use of technology (McGlynn, 2005). The goal of the current study was to examine current student and teacher perceptions of effectiveness of teaching methods, with particular comparison between techniques emphasizing community versus individual learning.

Much of the existing teaching literature emphasizes personality traits of master teachers (Buskist, Sikorski, Buckley & Saville, 2002; Ginsberg, 2007; Moore, 2007). For example, in reviewing perceptions of what makes good teachers, Buskist et al.(2002) found that teachers and students at four-year colleges agree that good teachers have the following characteristics: They are approachable, creative and interesting, encouraging and caring, enthusiastic, flexible and open-minded, knowledgeable, hold realistic expectations and are fair, and respectful. Similar results were found for two-year institutions (Shaefer, Epting, Zinn & Buskist, 2003). In both of these studies, the focus was on what teachers are, i.e., their personality attributes, and not what they do in the classroom. Similarly, Moore (2007) found that when asked to nominate a teacher for a teaching excellence award, alumni mentioned the personality attributes of the teacher more than any specific techniques. Alumni most valued the sense of belonging and of community that excellent teachers encourage. They also nominated teachers who made them feel listened to and understood. Moore concluded that it is the teacher's attributes, and not actions that build this sense of community and belonging.

Although personality attributes are likely important, they may be overemphasized in students' recall of effective teaching due to gestalt processes in memory and the fundamental attribution error in social psychology (Ross, Amabile, & Steinmetz, 1977). Students who are asked to describe excellent teachers may naturally focus on the personality of such teachers and overlook the context and techniques used in the classroom. However, while it is difficult to change your personality, most teachers can adopt pedagogical techniques that lead to effective instruction. Asking students about teaching techniques directly may yield practical suggestions for techniques that help build the sense of community that students value.

Research on interactive learning and student engagement support the idea that building community is effective pedagogy (Hake, 1998). Hake found that teachers who employ interactive techniques showed pre-post test gains in introductory physics courses that were twice as large as students' performance in non-interactive classrooms. In addition, Casteel and Bridges (2007) found that upper-division psychology students rated seminar courses with student led discussion groups more favorably than traditionally taught courses. Researchers have found that discussion increases student memory (Abowitz, 1990) and enthusiasm (Hedley, 1994). Kember and Grow's (1994) work suggests that teachers need to pay attention to encouraging students to interact with knowledge and to motivation of student learning and problem solving, not in simply transmitting knowledge via lecture.

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The current study examines the issue of teaching excellence from the pedagogical point of view rather than focusing on personality traits of good teachers. We hope to gain insight into classroom behaviors that help this generation of students feel connected and engaged in the learning process. For example, group discussion, linking material to students' lives, sharing examples from teachers' lives, and group work all may contribute to a student's sense of belonging in the classroom, and may enhance memory. Although ultimately useful for assessing learning outcomes, techniques that isolate learners or induce competition for grades, such as papers, exams and quizzes may be less likely to build community that enhances initial learning motivation.

We compared responses of psychology teachers and undergraduate students about what pedagogical techniques were viewed as interesting and effective in helping students learn. Goals included measuring the agreement between students and teachers on which techniques are interesting and effective, and examining whether techniques that emphasize community were rated as more effective than those that emphasized individual learning.

### **Methods**

# **Participants**

Fifteen psychology teachers and 120 students voluntarily completed the primary survey on perceptions of interest and effectiveness of pedagogical techniques. The students were surveyed in psychology courses that ranged from sophomore to senior level at a public liberal arts college in southwest Colorado. The faculty participants received surveys in their college mailboxes, and were from this college as well as a state university in Kansas. An additional sample of 17 junior and senior students completed a separate survey to rate each technique on how much it builds connections or isolates learners.

#### **Materials**

Ratings of level of interest and effectiveness. In the primary survey, 17 pedagogical techniques were presented along with two rating scales. The first asked how interesting that technique was on a scale of 1 (not at all interesting) to 7 (very interesting). The second asked how effective the technique was at helping students learn on a scale of 1 (not at all effective) to 7 (very effective). The techniques were: lecture, movie clips, class discussion, student presentations, tests, homework, small group discussion, project based learning, writing papers, simulation games, in-class lab activities, out of class group projects, reading textbooks, quizzes, students share examples from their lives, teacher shares examples from their life, and journaling. The list of techniques was developed by brainstorming with colleagues about techniques that they typically used in the classroom. Definitions of the techniques were left to the interpretation of individual participants, which allowed them to base their ratings on their own experiences. We conceptualized techniques such as discussions, examples from student and teachers lives, and group projects as building community whereas techniques such as tests, lectures, movie clips, texts, papers, journaling were viewed as more individual.

Table 1. Average effectiveness ratings for pedagogical techniques.

Technique	Student Ratings		Teacher Ratings		
	Mean	SD	Mean	SD	p
Teacher's life	5.85	1.19	5.21	1.81	.05
Student's life	5.50	1.43	4.78	1.37	.08
Class Discussion	5.75	1.15	5.07	1.07	.04
Lab	5.55	1.13	6.08	.86	.06
Simulation Game	5.44	1.28	5.00	1.41	.30
Small group discussion	5.41	1.39	4.79	1.48	.12
Project	5.44	1.23	5.77	1.01	.36
Movie clips	5.27	1.19	4.50	1.56	.03
Paper	5.29	1.42	5.93	1.14	.07
Homework	5.31	1.13	5.29	1.20	.94
Journaling	4.71	1.59	4.50	1.91	.65
Lecture	4.73	1.57	4.57	1.22	.71
Text	4.68	1.56	4.71	.91	.94
Test	4.66	1.61	4.93	1.49	.55
Quiz	4.54	1.61	5.14	1.10	.08
Student Presentation	4.22	1.46	4.43	1.45	.61
Out of class group project	4.01	1.58	4.57	1.09	.10

Ratings of community versus individual emphasis. To identify and confirm which techniques may be perceived as building community versus isolating learners, a separate group of students completed a questionnaire using a 7-point scale with the following endpoints: 1 = ``Makes me feel isolated from other students and/or faculty;'' 7 = ``Makes me feel connected to other students and/or faculty.''

Results from this additional sample showed that student ratings matched our conceptualizations of which techniques emphasized community versus individual learning. A paired sample t-test showed that students indeed rated the group of community techniques (i.e., discussions, examples from student and teachers lives, group projects) as significantly higher in making them feel connected (M = Mean = 5.71, SD = .78) than did the individual techniques (i.e., tests, lectures, movie clips, texts, papers, journaling); (M = 3.62, SD = .82); t(16) = 10.02, p < .001.

# **Results**

We used Pearson correlation coefficients in primary analyses to look for relationships between ratings of interest and effectiveness. Results suggested that students and teachers agreed on which techniques were interesting (r = .89), but there was less agreement

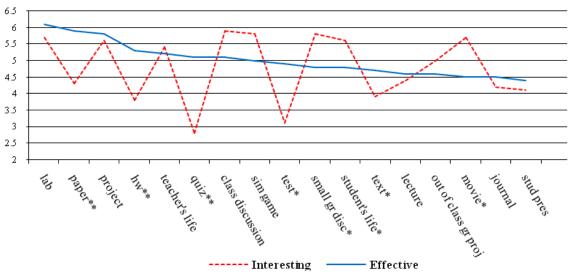
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on what was effective (r = .54). Students tended to rate techniques they thought were interesting as effective (r = .73), whereas teachers were less likely to correlate the two ratings (r = .16).

We used independent samples t-tests, with alpha set at .05 to examine differences in student and teacher perceptions of effectiveness for each of the techniques. Means and standard deviations for ratings of each technique appear in Table 1 and Figures 1 and 2 show graphical representations of these data. Students rated class discussion, examples from students and teacher's lives, and movies as significantly more effective than did teachers (all p < .05). Teachers rated labs, papers and quizzes as more effective than did students (all p < .05).

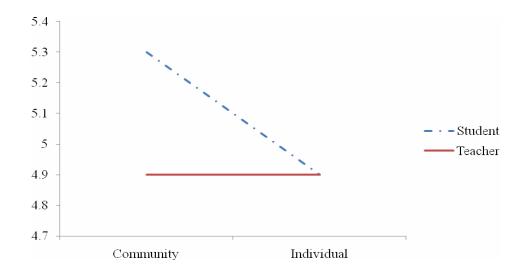
Figure 1. Student ratings of pedagogical techniques.





Overall, students rated activities promoting a sense of community (i.e., discussions, examples from student and teachers lives, group projects) as more effective than those emphasizing individual learning (i.e., tests, lectures, movie clips, texts, papers, journaling) t(118) = 3.81, p < .001. This difference was not significant for teachers t(14) = 0.08, p = .94. This difference is illustrated in Figure 3.

Figure 3. Average student and teacher ratings of community and individual teaching techniques.



# **Discussion**

Student results reinforced what cognitive psychologists know: to learn something, one first has to pay attention. With a rapidly changing and diverse new generation of college students, getting thier attention and keeping them engaged may be vital to their success. Students in this study valued teaching techniques that were interesting and involved them personally with the material through discussion, projects, papers, and lab work. Least liked by students were techniques that tend to isolate learners: Ouizzes, tests, texts, journal writing, student presentations and lecture. The high correlation between students' ratings of interest and effectiveness is supported by memory research (Baddeley, 1999), and the lack of correlation for teachers' ratings may be of concern. Klemm (2007) argues that students need to be taught effective memory strategies to help with leaning and thinking skills. Perhaps teachers can also improve by making information memorable through effective teaching techniques. Students particularly valued discussion and personal stories as effective learning tools. Given that researchers have found that discussion increases student memory (Abowitz, 1990), teachers may want to consider increasing time for structured discussion that is relevant to academic concepts (e.g., debating competing theories or applying concepts to case examples). It may also be that discussion and inclusion of examples from both student and teacher lives helps build the sense of community and personal contact that lead students to nominate teachers for awards (Moore, 2007).

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We know that personality of a teacher is an important predictor of teaching excellence. This work suggests that what we do in the classroom is also important. We may not be able to easily change who we are, but we can change what we do. Educators may benefit from the expertise and experience of students. Students who sit in the classroom daily know that it is difficult to retain information that is not presented in a format that they find interesting. Deeper levels of processing that come with personal stories and discussion are perceived by students as enhancing learning. Techniques that promote a sense of community and engagement with the material are valued by today's students. Teachers can use these pedagogical techniques to help create an environment conducive to learning.

These results yield information about student and teacher perceptions of the effectiveness of teaching techniques. A logical next step in this line of inquiry is whether these perceptions would match actual learning outcomes. Future research is needed to investigate the effects of community versus individual learning on objective learning outcomes such as grades. Although the current study cannot definitively answer whether teachers or students are more accurate in their ideas of what constitutes effective learning, it raises questions for future empirical work in this area. Whereas teacher's perceptions may be based on years of experience and training and thus valuable, whether these perceptions are still correct as the generations of students evolve remains an empirical question.

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